

Looking Forward

- The Technology Demonstration Program and the Research and Development Program will be reopened in 2019 for new projects. These programs had been suspended since 2010 to deploy more funds to the Green Energy Program.
- The Solar Schools Curriculum Program will be evaluated to enhance the program’s learning objectives for teachers and students.
- The regulatory process for updated GEF regulations will be completed, with newly published program standards and a streamlined one-step Green Energy Program application.
- A centralized online application database will be created in coordination with DNREC’s Energy Efficiency Investment Fund.

Front cover: Children explore wind generation in a classroom exercise (upper right); installing rooftop solar PV (lower left).

Focus: Opportunities for Sustainable Power at Home



New solar PV panels on the Perey residence in Wilmington.

Randall and Jennifer Perey had considered solar, but did not think they had sufficient sun exposure. After their neighbors trimmed some trees, the Pereys reconsidered.

Installation: 8.1 kW, with 5.4 kW qualified for Green Energy Program incentive
Installer: KW Solar Solutions

The Delaware state grant certainly helped sway our final decision. We went live on the shortest days of the year, but [in] March our meter finally spun backwards. What a great feeling of being an electrical energy provider.

Randall J. Perey
City of Wilmington

We are so thankful to have the opportunity to offer our customers the Delaware Green Energy Grant to help offset the cost of their Solar Installation. The grant has been one of the major deciding factors for many of our customers over the past 15 years.

Jackie Johnson
KW Solar Solutions, Inc.

Contact Us

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Annual Report
Calendar Year 2018



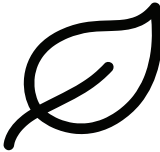
Green
Energy
Fund

What is the Green Energy Fund?

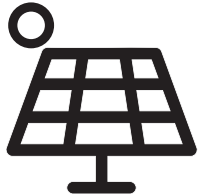
For twenty years, the Green Energy Fund (GEF) has been transforming the Delaware market for renewable energy. The GEF was established by the Delaware Legislature in 1999 in Title 29 § 8057 of the Delaware Code. It is funded by Delmarva Power electric customers who are then eligible to access the GEF for renewable energy projects.

The purpose of the GEF is to accelerate deployment of renewable energy systems in Delaware. Why? Because renewable energy:

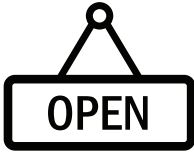
decreases
environmental impacts



improves
energy security



benefits
our local economy



GEF resources in 2018 were principally used to fund work under the Green Energy Program to help Delaware homeowners, businesses, and nonprofit organizations meet their energy needs in a more sustainable way through the installation of renewable energy systems. Qualifying systems include solar photovoltaic (PV) systems, solar water heating systems (SWH), small wind turbines, geothermal heat pumps, and fuel cells that utilize a renewable fuel source.




Residents can add one or many systems to power homes and cars, including solar photovoltaic panels, ground source heat pump, and wind.

Highlights


- In 2018, the Green Energy Program received 195 new applications requesting funds to support 1.39 megawatts (MW) of new solar, 55 tons of new geothermal capacity, and 236 sq. ft. of additional solar thermal collectors in Delaware. The additional solar capacity reduces carbon dioxide (CO2) by 1,300 metric tons annually. Saving 1,300 metric tons of CO2 each year is equivalent to:

146,281
gallons of gasoline
consumed



OR

227
homes' electricity use
for one year



- DNREC's Division of Climate, Coastal, & Energy teamed with the Delaware Technology Student Association and other partners to host 19 teams of middle-school students from across the state for the 2018 Junior Solar Sprint solar-powered model car competition. Racers competed for top speed in time trials, as well as for awards in engineering design and creative design.
- Data on the Green Energy Program is shared through Delaware's open data portal, increasing transparency of information on the program. Data on program-supported installations are updated monthly, so anyone can see the effects that the Green Energy Fund is having in their neighborhood or throughout Delmarva Power's territory.
- Since 1999, the Green Energy Fund has:
 - provided more than \$54.3 million for renewable energy projects installed in Delaware
 - benefited 4,550 Delaware homeowners, businesses, and nonprofit organizations
 - supported local jobs at 23 solar installation companies and more than 35 geothermal installers
 - helped increase Delaware's solar capacity from 8.6 MW in 2010 to over 100 MW in early 2019
 - awarded \$2.1 million to projects in the Technology Demonstration Program
 - awarded \$1.2 million in Research and Development Program funding

Sources and Uses of GEF Funds

The GEF collected \$2,901,528.65 in proceeds in 2018. By statute, up to 65 percent of funds can be directed to the Green Energy Program, up to 35 percent of funds can be directed to Research & Development and Technology Demonstration programs, and up to 10 percent of funds can be used for administration, marketing, and outreach.

The table below summarizes funding of Green Energy Program projects in 2018.

2018 Green Energy Program Grants Paid

		Number of Projects	System Capacity	Funding Paid	Leveraged Funds
Residential	PV	534	3.74 MW	\$853,794	\$20,000,488
	Geo	15	76.5 tons	\$54,150	\$459,423
	SWH	2	118 Sq. Ft.	\$8,565	\$20,000
Commercial	PV	3	0.06 MW	\$9,000	\$220,804
Non-Profit	PV	7	0.15 MW	\$137,550	\$425,727
Totals		561		\$1,063,059	\$21,126,442

In addition to funding paid on projects during 2018, at the close of 2018, the Green Energy Program had 603 applications totaling \$2,230,288.65 in funding commitments for projects in process.

DNREC has been successful in using the Green Energy Program to leverage other investment into clean energy systems. At a nearly 20:1 ratio, the leveraging effect of the GEF in 2018 is a real success.



Geothermal systems provide heating and cooling to homes and businesses. This is a residential system in Sussex County.



Entry in Junior Solar Sprint (top); rooftop installation of solar PV panels and solar thermal panel (bottom left); solar PV panels on a home (bottom right).

